

In the Claims:

Please amend the claims as follows:

1. (original) A modular sleeve for interfacing modular enhancements to a firearm, said firearm having minimally a receiver with a stock and barrel attached thereto, said barrel defining the forward portion of the firearm and said stock defining the rearward portion of the firearm, said firearm longitudinal axis being defined as horizontal and running from said stock through said receiver to said barrel, said receiver having a forward portion, a top and a rearward portion, said barrel being joined to the forward portion of the receiver, said stock being joined to the rearward portion of the receiver, comprising:

a universal receiver sleeve having a top side, an underside and two opposite sides connecting said top side with said underside, said universal receiver sleeve being further defined as having a forward portion and a rear portion, the underside of the rear portion of the universal receiver sleeve being fixedly attached to the firearm receiver top, said receiver sleeve forward portion extended forward above the firearm barrel;

an upper handguard piece having a front, rear, top, open bottom, opposing sides, outer side surfaces and inner side surfaces, said top, sides and bottom defining a hollow interior, said front and rear defining an upper handguard piece longitudinal axis, said upper handguard piece top being joined to the underside of the forward portion of the receiver sleeve;

a bottom handguard piece having a front, rear, open top, bottom, opposing sides, outer side surfaces and inner side surfaces, said bottom, sides and top defining a hollow interior, said front and rear defining a bottom handguard piece longitudinal axis, said bottom handguard piece being removably attached to the upper handguard piece;

wherein, said upper handguard piece and attached bottom handguard piece surround the firearm barrel without touching said barrel.

2. (original) A modular sleeve as recited in claim 1, wherein:

each of the upper handguard side outer surfaces have two longitudinal channels formed therein, a large and shallow upper channel and a bottom interface channel, said bottom interface channel being positioned near to the upper hand guard piece bottom.

3. (original) A modular sleeve as recited in claim 2, wherein:

each of the bottom handguard side outer surfaces have two longitudinal channels formed therein, a small and shallow upper channel and a larger, shallow bottom channel.

4. (original) A modular sleeve as recited in claim 3, wherein:

the bottom hand guard inner side surfaces each have a longitudinal protrusion positioned near to the top, each protrusion being a mirror of the other;

wherein the bottom handguard piece is adapted to being joined to the upper handguard piece by sliding the bottom handguard longitudinal protrusion into the upper handguard bottom interface channel.

5. (original) A modular sleeve as recited in claim 4, further comprising:

a plurality of apertures formed in the upper handguard piece; and

a plurality of apertures formed in the lower handguard piece.

6. (original) A modular sleeve as recited in claim 5, wherein:
said upper handguard interface channels and bottom handguard upper channel have corresponding cutout portions.
7. (original) A modular sleeve as recited in claim 6, further comprising:
a plurality of spring-loaded connectors inserted through the bottom handguard piece sides near to the bottom handguard piece top, said connectors adapted to hold the top and bottom handguard pieces in a desired alignment.
8. (original) A modular sleeve as recited in claim 7, wherein:
the top of the upper handguard piece and receiver sleeve forward portion are integrated into one piece, thereby forming a resulting upper handguard piece top, said resulting upper handguard piece top having an upper surface and an under surface.
9. (original) A modular sleeve as recited in claim 8, further comprising:
a longitudinal gap in said resulting upper handguard piece top upper surface therein.
10. (original) A modular sleeve as recited in claim 9, further comprising:
a hinging element fixed to the resulting upper handguard piece top upper surface at the upper handguard front;
an elongated interface element approximately equal to the said longitudinal gap, said elongated interface element adapted to pivotally join said hinging element.

11. (original) A modular sleeve as recited in claim 10, further comprising:

a sleeve dovetail interface element adapted for engagement with the rear portion of the universal receiver sleeve rear portion, said sleeve dovetail interface element having an exterior horizontal surface with a unique cross-sectional dovetail shape adapted to attach ancillary equipment, and an opposite interior surface with a standard dovetail configuration for securing the universal receiver sleeve rear portion the receiver top.

12. (original) A modular sleeve as recited in claim 11, further comprising:

a plurality of notches formed in the receiver top, each said notch having a rectangular cross section and being formed transverse to the longitudinal axis of the firearm;

an elongated rectangular opening formed in a first universal receiver sleeve opposite side, said rectangular opening extending from a universal received sleeve opposite side lower surface a predetermined distance toward the universal receiver top side and terminating in a rectangular opening upper edge, said rectangular opening upper edge having a plurality of rectangular notches formed therein;

a plurality of apertures formed in a second universal receiver sleeve opposite side, each said aperture being formed directly opposite a first universal received sleeve opposite side rectangular notch;

a plurality of projecting elements formed on the sleeve dovetail interface element interior surface, each said projecting element having a rectangular cross-section, said projecting elements adapted to engage the notches across the receiver top;

wherein, said sleeve dovetail interface element interior surface is adapted to engage said universal receiver sleeve opposite side elongated opening and the side of said receiver top;

wherein, said plurality of sleeve dovetail interface element interior surface projecting elements are adapted to engage said elongated rectangular opening rectangular notches, said receiver top notches and said plurality of apertures in said second received sleeve opposite side; and

a plurality of nuts each adapted to engage a portion of a sleeve dovetail interface element interior surface projecting element projecting through each said aperture.

13. (original) A modular sleeve as recited in claim 12, wherein:

the resulting upper handguard piece top upper surface is formed into a male weaver type interface.

14. (original) A modular sleeve as recited in claim 13, wherein:

the bottom handguard piece bottom is formed into a male weaver type interface.

15. (original) A modular sleeve as recited in claim 14, wherein:

each upper handguard outer surface bottom interface channel has a general female, T-shaped cross section;

each bottom hand guard inner side surfaces protrusion has a T-shaped cross section.

16. (original) A modular sleeve as recited in claim 15, further comprising:
a plurality of the apertures in the upper handguard piece and lower handguard piece have helicoils inserted therein, said helicoils being adapted for threaded engagement with a screw.
17. (original) A modular sleeve as recited in claim 16, further comprising:
a plurality of external dovetail interface elements having an exterior horizontal surface with a cross-sectional dovetail shape adapted to attach ancillary equipment, and an opposite, generally flat, interior surface, said interior surface having a plurality of projecting elements, each projecting element having a T-shaped cross-section adapted to engage the cutout portions of said upper handguard interface channels and bottom handguard upper channels.
18. (original) A modular sleeve as recited in claim 16, further comprising:
a plurality of apertures in said external dovetail interface elements, said apertures adapted to receive a screw.
19. (newly added) A sleeve for attaching modular enhancements to a firearm, said firearm having a receiver, said receiver having a forward portion, a top and a rearward portion, a barrel joined to the forward portion of the receiver and a stock being joined to the rearward portion of the receiver, said sleeve comprising:
a receiver sleeve having a top side, a bottom side, two opposite sides, a forward portion and a rear portion, wherein the bottom side of the rear portion of the universal receiver sleeve is configured to be fixedly attached to the top of said firearm receiver

and said forward portion of said receiver sleeve is configured to extend above at least a portion of the firearm barrel; and

a handguard piece depending from the bottom side of the forward portion of the receiver sleeve, said handguard piece having a side wall that forms a hollow interior cavity, wherein, said sidewall of said handguard piece surrounds the firearm barrel without touching said barrel when said receiver sleeve is attached to said firearm receiver.

20. (newly added) The sleeve of claim 19, wherein the handguard piece and receiver sleeve forward portion are integrated into one piece.

21. (newly added) The sleeve of claim 19, further comprising:
a plurality of apertures formed in the sidewall of said handguard piece.

22. (newly added) The sleeve of claim 19, further comprising:
an auxiliary dovetail interface element on the top of said universal receiver sleeve, said auxiliary dovetail element having a cross-sectional dovetail shape adapted for the mounting of ancillary equipment.

23. (newly added) The sleeve of claim 22, further comprising:
at least one auxiliary dovetail interface element on the sidewall of said handguard piece, said auxiliary dovetail element having a cross-sectional dovetail shape adapted for the mounting of ancillary equipment.

24. (newly added) The sleeve of claim 23, said at least one auxiliary dovetail interface element comprising:

three auxiliary dovetail interface elements on the sidewall of said handguard piece.

25. (newly added) A modular sleeve as recited in claim 22, wherein said auxiliary dovetail interface is a male weaver type interface.

26. (newly added) A sleeve for attaching modular enhancements to a firearm, said firearm having a receiver, said receiver having a forward portion, a top and a rearward portion, a barrel joined to the forward portion of the receiver and a stock being joined to the rearward portion of the receiver, said sleeve comprising:

a receiver sleeve having a top side, a bottom side, two opposite sides, a forward portion and a rear portion, wherein the bottom side of the rear portion of the universal receiver sleeve is configured to include a receiver dovetail interface element, said receiver dovetail interface element having an interior surface configured for securing the universal receiver sleeve rear portion to the receiver top and said forward portion of said receiver sleeve is configured to extend above at least a portion of the firearm barrel;

an auxiliary dovetail interface element on the top side of the universal receiver sleeve, said auxiliary dovetail element having a cross-sectional dovetail shape adapted for the mounting of ancillary equipment; and

a handguard piece depending from the bottom side of the forward portion of the receiver sleeve, said handguard piece having a side wall that forms a hollow interior cavity, wherein, said sidewall of said handguard piece surrounds the firearm barrel without touching said barrel when said receiver sleeve is attached to said firearm

receiver.

27. (newly added) The sleeve of claim 26, wherein the handguard piece, said receiver sleeve and said auxiliary dovetail interface element are integrated into one piece.

28. (newly added) The sleeve of claim 26, further comprising:
a plurality of apertures formed in the sidewall of said handguard piece.

29. (newly added) A sleeve as recited in claim 26, wherein said auxiliary dovetail interface is a male weaver type interface.

30. (newly added) A sleeve of claim 26, further comprising:
a plurality of transverse notches formed in the auxiliary dovetail interface element, each said notch having a substantially rectangular cross section.

31. (newly added) A sleeve as recited in claim 26, further comprising:
a plurality of apertures in said auxiliary dovetail interface element, said apertures adapted to receive a screw.

32. (newly added) A sleeve for attaching modular enhancements to a firearm, said firearm having a receiver, said receiver having a forward portion, a top and a rearward portion, a barrel joined to the forward portion of the receiver and a stock being joined to the rearward portion of the receiver, said sleeve comprising:

a universal receiver sleeve having a top side, a bottom side, two opposite sides, a forward portion and a rear portion, wherein the bottom side of the rear portion of the universal receiver sleeve is configured to include a receiver dovetail interface element, said receiver dovetail interface element having an interior surface with a standard dovetail configuration for securing the universal receiver sleeve rear portion to the receiver top and said forward portion of said receiver sleeve is configured to extend above at least a portion of the firearm barrel;

a primary auxiliary dovetail interface element on the top side of the universal receiver sleeve, said auxiliary dovetail element having a cross-sectional dovetail shape adapted for the mounting of ancillary equipment;

a handguard piece depending from the bottom side of the forward portion of the receiver sleeve, said handguard piece having a side wall that forms a hollow interior cavity, wherein, said sidewall of said handguard piece surrounds the firearm barrel without touching said barrel when said receiver sleeve is attached to said firearm receiver; and

at least one secondary auxiliary dovetail interface element on the sidewall of said handguard piece, said secondary auxiliary dovetail element having a cross-sectional dovetail shape adapted for the mounting of ancillary equipment.

33. (newly added) The sleeve of claim 32, said at least one secondary auxiliary dovetail interface element comprising:

three secondary auxiliary dovetail interface elements on the sidewall of said handguard piece.

34. (newly added) A sleeve as recited in claim 32, further comprising:

a plurality of apertures in said primary and secondary auxiliary dovetail interface elements, said apertures adapted to receive a screw.

35. (newly added) A sleeve as recited in claim 32, wherein said primary and secondary auxiliary dovetail interfaces are male weaver type interfaces.

36. (newly added) A sleeve for attaching modular enhancements to a firearm, said firearm having a receiver, said receiver having a forward portion, a top and a rearward portion, a barrel joined to the forward portion of the receiver and a stock being joined to the rearward portion of the receiver, said sleeve comprising:

a universal receiver sleeve having a top side, a bottom side, two opposite sides, a forward portion and a rear portion, wherein the bottom side of the rear portion of the universal receiver sleeve is configured to be fixedly attached to the top of said firearm receiver and said forward portion of said receiver sleeve is configured to extend above at least a portion of the firearm barrel;

an upper handguard piece having two sidewalls depending from the bottom side of the forward portion of the receiver sleeve, said side walls defining an open bottom and a hollow interior; and

a bottom handguard piece having two sidewalls extending upwardly, said sidewalls defining an open top and a hollow interior, wherein said bottom handguard piece is configured to be removably attached to the upper handguard piece, such that said upper handguard piece and said attached bottom handguard piece surround the firearm barrel without touching said barrel.

37. (newly added) A sleeve system for attaching modular enhancements to a firearm, said firearm including an upper receiver having a forward portion and a top, and further including a barrel joined to the forward portion of the upper receiver, said sleeve system comprising:

a receiver sleeve having a top, a bottom, a forward portion and a rear portion wherein the bottom of the rear portion of the receiver sleeve is configured and arranged to be fixedly received over the top of said upper receiver, and said forward portion of said receiver sleeve is configured to extend in spaced relation above at least a portion of the barrel of the firearm;

a dovetail interface extending longitudinally along at least a portion of the top of the receiver sleeve; and

a handguard fixedly attached to the forward portion of the receiver sleeve such that the handguard is not movable relative to the receiver sleeve and having walls that depend downwardly and outwardly from opposing sides of the forward portion of said receiver sleeve such that said walls at least partially surround the barrel without touching the barrel.

38. (newly added) The sleeve system of claim 37, further comprising:

at least one auxiliary dovetail interface extending longitudinally along an outside surface of said wall of said handguard.

39. (newly added) A sleeve system for attaching modular enhancements to a firearm, said firearm including an upper receiver having a forward portion and a top, and further including a barrel joined to the forward portion of the upper receiver, said sleeve system comprising:

a receiver sleeve having a top, a bottom, a forward portion and a rear portion wherein the bottom of the rear portion of the receiver sleeve is configured and arranged to be fixedly received over the top of said upper receiver, and said forward portion of said receiver sleeve is configured to extend in spaced relation above at least a portion of the barrel of the firearm;

a dovetail interface extending longitudinally along at least a portion of the top of the receiver sleeve;

a substantially tubular handguard having an upper portion that is fixedly attached to the forward portion of the receiver sleeve such that the handguard is not movable

relative to the receiver sleeve and further having a lower portion that depends downwardly from said upper portion such that said upper and lower portions cooperate to define a hollow interior cavity that at least partially surrounds the barrel without touching the barrel; and

at least one auxiliary dovetail interface extending longitudinally along an outside surface of said handguard.

40. (newly added) A sleeve system for attaching modular enhancements to a firearm, said firearm including an upper receiver having a forward portion and a top, and further including a barrel joined to the forward portion of the upper receiver, said sleeve system comprising:

a receiver sleeve having a top, a bottom, a forward portion and a rear portion wherein the bottom of the rear portion of the receiver sleeve is configured and arranged to be fixedly received over the top of said upper receiver, and said forward portion of said receiver sleeve is configured to extend in spaced relation above at least a portion of the barrel of the firearm;

a dovetail interface extending longitudinally along at least a portion of the top of the receiver sleeve;

an accessory support attached to the forward portion of the receiver sleeve, said accessory support and having opposing side walls that depend downwardly and outwardly from opposing sides of the forward portion of said receiver sleeve such that said side walls at least partially encircle the barrel without touching the barrel;

said side walls each having a terminal edge with engagement formations for receiving an accessory having complimentary mating engagement formations.

41. (newly added) The sleeve system of claim 40, further comprising:

an accessory having opposing side walls that extend upwardly and outwardly from opposing side edges thereof, said side walls having a terminal edge with complimentary mating engagement formations.

42. (newly added) The sleeve system of claim 41, wherein said accessory support comprises an upper handguard portion and said accessory comprises a lower handguard portion, said upper handguard portion and said lower handguard portion surround the barrel without touching the barrel.

43. (newly added) A interface system for attaching modular enhancements to a weapons system, said interface system comprising:

an upper interface, said upper interface including means for mounting said upper interface to a weapons system; and

an accessory support extending from said upper interface, said accessory support and having opposing side walls that depend downwardly and outwardly from said upper interface, wherein said side walls each include a terminal edge with engagement formations for receiving an accessory having complimentary mating engagement formations.

44. (newly added) The interface system of claim 43, further comprising:

an accessory having opposing side walls that extend upwardly and outwardly from opposing side edges thereof, said side walls having a terminal edge with complimentary mating engagement formations for engaging said mating formations on said accessory support.